

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE 1 OF 1 PAGES
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 03 May 2004	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY CODE		7. ADMINISTERED BY (If other than Item 6) CODE		
US ARMY ENGINEER DISTRICT, PHILADELPHIA CONTRACTING DIVISION WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PA 19107-3390		SEE ITEM 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(√)	9A. AMENDMENT OF SOLICITATION NO. W912BU-04-B-0008	
		X	9B. DATED (SEE ITEM 11) 09 APRIL 2004	
			10A. MODIFICATION OF CONTRACTS/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 0 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

BEACH NOURISHMENT, CAPE MAY INLET TO LOWER TOWNSHIP AND LOWER CAPE MAY MEADOWS, CAPE MAY, NJ

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(√)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

THIS AMENDMENT DOES NOT EXTEND THE BID OPENING DATE OF 11 MAY 2004 AT 11:00 A.M.

(CONTINUED ON THE NEXT PAGE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

14. DESCRIPTION OF AMENDMENT (continued)

a. SF 1442 AND BIDDING SCHEDULE: Section 00010, Pages 3 and 4 – Please delete pages 00010-3 and 4 in its entirety and substitute the new pages of the same number, annotated Amendment No. 0001, attached hereto.

b. Section 00815 – WAGE RATES: Please delete Section 00815 in its entirety and substitute the new Section of the same number, annotated Amendment No. 0001, attached hereto.

c. TECHNICAL SPECIFICATIONS:

NOTE: The following sections were amended. For simplicity, the complete section is being reissued to enable complete substitution/insertion of the section in existing hard copies. To make detection of changes easier, only those pages with changes on them are annotated with “Amendment No. 0001” in the upper right corner. In addition, changes on a page are highlighted in ***bold italics***.

(1) Section 01010 – SUMMARY OF WORK: Please delete Section 01010 in its entirety and substitute the new Section of the same number, annotated Amendment No. 0001, attached hereto.

(2) Section 02390 – BEACHFILL: Please delete Section 02390, pages 1 through 7 in its entirety and substitute the new Section 02390, pages 1 through 8, annotated Amendment No. 0001, attached hereto.

(3) Section 02446 – SAND FENCE AND DUNE GRASS: Section 02446 in its entirety and substitute the new Section of the same number, annotated Amendment No. 0001, attached hereto.

(4) Section 02500 – DUNE CROSSOVERS AND ACCESS ROAD: Section 02500 in its entirety and substitute the new Section of the same number, annotated Amendment No. 0001, attached hereto.

(5) Section 06140 – PIPE SUPPORT SYSTEMS: Please delete Section 06140 in its entirety and substitute the new Section of the same number, annotated Amendment No. 0001, attached hereto.

d. CONTRACT DRAWINGS:

(1) Drawing No. 62322 – Please delete Drawing Number 62322 – “GENERAL PLAN, LEGEND AND GENERAL NOTES”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(2) Drawing No. 62337 – Please delete Drawing Number 62337 – “PLAN SURVEY BASELINE No. 2 - STATION 51+75 TO 88+50”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(3) Drawing No. 62338 – Please delete Drawing Number 62338 – “PLAN SURVEY BASELINE No. 2 - STATION 88+50 TO 101+75”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

14. DESCRIPTION OF AMENDMENT (continued)

(4) Drawing No. 62339 – Please delete Drawing Number 62339 – “PLAN SURVEY BASELINE No. 2 - STATION 101+75 TO 133+50”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(5) Drawing No. 62345 – Please delete Drawing Number 62345 – “TYPICAL BEACHFILL SECTIONS AND DETAILS - SBL No. 2”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(6) Drawing No. 62346 – Please delete Drawing Number 62346 – “OUTFALL #1 - SECTIONS AND DETAILS - SURVEY BASELINE No. 2”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(7) Drawing No. 62347 – Please delete Drawing Number 62347 – “DUNE CONTRUCTION DETAILS - SURVEY BASELINE No. 2”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(8) Drawing No. 62348 – Please delete Drawing Number 62348 – “DUNE CROSSOVER DETAILS - SURVEY BASELINE No. 2”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

(9) Drawing No. 62349 – Please delete Drawing Number 62349 – “HANDICAP CROSSOVER DETAILS - SURVEY BASELINE No. 2”, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 30 April 2004, attached hereto.

e. Please indicate receipt of this amendment on Standard Form 1442(SOLICITATION, OFFER, AND AWARD) as Amendment No.0001. Failure to acknowledge all amendments may be cause for rejection of the bid.

BIDDING SCHEDULE

(To be attached to Standard Form 1442)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
BASE BID:					
1a.	Mobilization and Demobilization	1	Job	L.S.	\$
1b.	Beachfill Areas #1 & #2	1,021,700	C.Y.	\$	\$
1c.	Sea Turtle Modifications and Whale Monitoring (If a Hopper Dredge is not to be used, Enter \$0)	1	Job	L.S.	\$
1d.	Pedestrian Dune Crossovers	261	LF	\$	\$
1e.	Vehicle Dune Crossovers	1	Job	L.S.	\$
1f.	Handicap Dune Crossovers	1139	LF	\$	\$
1g.	Dune Grass (Only Required in Area #2)	1	Job	L.S.	\$
1h.	Sand Fence	9878	LF	\$	\$

TOTAL ESTIMATED BASE BID: \$

OPTION 1:

2a.	Beachfill - Area #3	696,400	C.Y.	\$	\$
2b.	Sea Turtle Modifications and Whale Monitoring (If a Hopper Dredge is not to be used, Enter \$0)	1	Job	L.S.	\$

2c.	Extension of Stormwater Outfalls	270	LF	\$	\$
2d.	Pedestrian Dune Crossovers	444	LF	\$	\$
2e.	Vehicle Dune Crossovers	1	Job	L.S.	\$
2f.	Dune Grass	1	Job	L.S.	\$
2g.	Sand Fence	9600	LF	\$	\$
TOTAL ESTIMATED OPTION 1:					\$

OPTION 2:

3.	Beachfill - Area #2	100,000	C.Y.	\$	\$
TOTAL ESTIMATED OPTION 3:					\$

OPTION 3:

4.	Beachfill - Area #2	100,000	C.Y.	\$	\$
TOTAL ESTIMATED OPTION 4:					\$

OPTION 4:

5.	Beachfill - Area #3	50,000	C.Y.	\$	\$
TOTAL ESTIMATED OPTION 5:					\$

OPTION 5:

6.	Beachfill - Area #3	50,000	C.Y.	\$	\$
TOTAL ESTIMATED OPTION 6:					\$

TOTAL ESTIMATED BASE BID AND OPTIONS: \$

NOTE: Bidders must bid on all items.

General Decision Number: NJ030002 03/19/2004

General Decision Number: NJ030002 03/19/2004

Superseded General Decision Number: NJ020002

State: New Jersey

Construction Types: Building, Heavy and Highway

Counties: Atlantic, Burlington, Camden, Cape May, Cumberland,
Gloucester, Mercer, Monmouth, Ocean and Salem Counties in New
Jersey.

MERCER COUNTY

Building (excluding single family homes and apartments up to
and including 4 stories), Heavy (does not include the counties
of BURLINGTON, CAMDEN, GLOUCESTER, AND SALEM) Highway
Construction Projects.

Modification Number Publication Date

0 06/13/2003

1 12/19/2003

2 02/27/2004

3 03/19/2004

ASBE0014-002 05/01/2003

BURLINGTON (townships of Edgewater Park, Lumberton, Sampton,
Shamong, Tabernacle, Westhampton, & Willingboro), CAMDEN, &
GLOUCESTER COUNTIES:

	Rates	Fringes
Asbestos Workers/Insulator (includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems. Also the application of firestopping material, openings and penetrations in walls, floors, ceilings, curtain walls and all lead abatement).....	\$ 30.91	16.55

ASBE0042-002 07/15/1999

SALEM COUNTY:

	Rates	Fringes
Asbestos Worker.....	\$ 23.99	9.89

ASBE0085-001 06/01/1994

	Rates	Fringes
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Asbestos Workers/Insulator

ZONE 1.....	\$ 20.20	6.35
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ZONE 2.....	\$ 18.30	6.825
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Includes the application of all insulating materials,
protective coverings, coatings, and finishes to all types of
mechanical systems

ASBESTOS WORKERS ZONE DEFINITIONS

ZONE 1: ATLANTIC, BURLINGTON (Bass River and Washington
Twps.); CAPE MAY, CUMBERLAND AND OCEAN (Eaglewood,
Lacy, Little Egg Harbor, Long Beach, Ocean, Stafford,
Tuckerton, and Union Twps.) COUNTIES.

ZONE 2: MONMOUTH (Remainder of County)

ASBE0089-002 07/01/2003

BURLINGTON (includes the townships of Bordentown, Burlington,
Chesterfield, Easthampton, Florence, Mansfield, Mount Holly,
New Hanover, North Hanover, Pembereton, Roebling, Springfield,
Wrightstown, & Woodland); MERCER COUNTY; MONMOUTH (includes the
townships of Allentown, Blansingburg, Brielle, Englishtown,
Farmingdale, Freehold, Howell, Manasquan, Millstone, Roosevelt,
Sea Crit, South Belmar, Spring Lake Heights, Upper Freehold,
Wall, & West Belmar); & OCEAN (includes the townships of
Beachwood, Berkeley, Breton Woods, Brick, Cederwood Park,
Dover, Gillford Park, Island Beach, Island Heights, Jackson,
Lakehurst, Lakewood, Manchester, New Egypt, Ocean Gate, Pine
Beach, Plumstead, South Toms River & Toms River) COUNTIES:

	Rates	Fringes
Asbestos Workers/Insulator.....	\$ 30.88	17.87

Includes the application of all insulating materials,
protective coverings, coatings, and finishes to all types of
mechanical systems

BOIL0028-002 08/01/2003

	Rates	Fringes
Boilermaker.....	\$ 34.63	20.45

* BRNJ0005-001 01/01/2004

	Rates	Fringes
Bricklayers, Stone Masons, Marble Masons, Cement Masons...	\$ 30.55	15.40

(Excludes Building Construction for Mercer County),
PLASTERERS, TILE LAYERS, & TERRAZZO WORKERS

CARP0031-001 05/01/2003

MERCER COUNTY (Remainder)

	Rates	Fringes
Carpenter.....	\$ 31.92	13.73
Millwright.....	\$ 31.92	13.73

CARP0454-002 07/01/2001

	Rates	Fringes
Dock Builder & Piledrivermen...	\$ 27.45	16.79+A

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Presidential Election Day, and Thanksgiving Day; provided employee works any of the 3 days in the 5-day work week preceeding the holiday and the first work day after the holiday.

CARP0623-001 05/01/2003

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND,
GLOUCESTER
AND SALEM COUNTIES

	Rates	Fringes
Carpenter, Insulator, Millwright & Soft Floor Layer.....	\$ 31.92	13.73

CARP0623-003 12/03/1994

CAMDEN, GLOUCESTER AND SALEM COUNTIES

	Rates	Fringes
Terrazzo Finisher.....	\$ 12.93	5.05

CARP0623-004 12/03/1994

ATLANTIC AND MONMOUTH COUNTIES:

	Rates	Fringes
Tile Finisher.....	\$ 8.45	13%

CARP0623-005 12/03/1994

CAMDEN, GLOUCESTER AND SALEM COUNTIES

	Rates	Fringes
Tile Finisher.....	\$ 12.72	5.05

CARP0623-006 12/03/1994

CAMDEN, GLOUCESTER AND SALEM COUNTIES

	Rates	Fringes
Marble Finisher.....	\$ 12.95	5.05

CARP0781-001 05/01/2003

MERCER COUNTY (Beginning from the present Post Office in Lawrenceville to a point Northward through the present "Radio Site" to the junction of Rosedale Road and Read's Mill Road to the junction of Pennington and Mount Rose Road to the Somerset County line, again starting at the present Post Office in Lawrenceville and Eastward to the junction of Brunswick Pike and Delaware and Raritan Canal Bridge taking the center of the Road to CLarksville then South on Providence Line Road to the Pennsylvania Railroad then East on Dutch Neck North to Grover's Mills to the Middlesex County Line)

	Rates	Fringes
Carpenter.....	\$ 31.92	13.73
Millwright.....	\$ 31.92	13.73

CARP1456-006 05/01/2003

	Rates	Fringes
Diver.....	\$ 38.28	26.41
Diver Tender.....	\$ 28.82	26.41

CARP1456-007 05/01/2003

MERCER AND MONMOUTH COUNTIES

	Rates	Fringes
Dock Builder & Piledrivermen...	\$ 31.54	24.61

CARP2018-001 05/01/2003

OCEAN COUNTY

	Rates	Fringes
Carpenter.....	\$ 31.92	13.73
Millwright.....	\$ 31.92	13.73

CARP2212-002 05/01/2003

BURLINGTON, MERCER, MONMOUTH AND OCEAN COUNTIES

	Rates	Fringes
Soft Floor Layer.....	\$ 31.92	13.73

CARP2250-001 05/01/2003

MONMOUTH COUNTY

	Rates	Fringes
Carpenter.....	\$ 31.92	13.73
Millwright.....	\$ 31.92	13.73

ELEC0269-003 10/01/2003

BURLINGTON (Area North of a line following the West and South limits of Burlington Borough from the Delaware River in a Southeasterly direction to the Burlington - Mt Holly Road,

South- Southeast along this Road to and including the Town of Mount Holly, East along the Pennsylvania Railroad to and including New Lisbon and continuing along the Pennsylvania Railroad to Ocean County Line), AND MERCER COUNTIES

	Rates	Fringes
Line Construction (EXCEPT RAILROAD WORK)		
Linemen, Cable Splicers, Equipment Operators and Technicians.....	\$ 38.40	47%
Truck Drivers, Groundmen and Winch Operators.....	\$ 30.72	47%

 ELEC0269-004 10/01/2003

BURLINGTON COUNTY (Area North of a line following the West and South limits of Burlington Borough from the Delaware River in a Southeasterly direction to the Burlington - Mount Holly Road, South-Southeast along this road to and including the Town of Mount Holly, East along the Pennsylvania Railroad to and including New Lisbon and continuiong along the Pennsylvania Railroad to the Ocean County Line) AND MERCER COUNTIES

	Rates	Fringes
Electrician & Cable Splicer....	\$ 38.40	47.3%+.25

 ELEC0351-001 10/01/2001

ATLANTIC; BURLINGTON (Edgewater park, Delanco, Delran, Cinnaminson, Moorestown, Mount Laurel, Wilingsboro, Hainesport, Lumberton, Medford, Evesham Townships; and the portion of Shamong, Tabernacle, and Woodland Townships North of the Central Railroad of New Jersey Line; and the portion of Burlington, Westhampton, Easthampton, South Hampton and Pemberton Townships South of a line starting at the Delaware River and following the Southern boundary of Burlington Borough to the Burlington - Mount Holly Road, along this road to Mount Holly around but excluding Mount Holly to the Pennsylvania Railroad along the Pennsylvania Line through, but excluding, Pemberton, through but excluding New Lisbon to the Ocean County line and that portion south of the Central Railroad of New Jersey line running through Chatsworth); CAMDEN; CAPE MAY; CUMBERLAND; GLOUCESTER; and SALEM COUNTIES:

	Rates	Fringes
Electrician & Cable Splicer....	\$ 32.89	51.05%+.20

 * ELEC0351-002 10/01/2001

ATLANTIC; BURLINGTON (Edgewater park, Delanco, Delran, Cinnaminson, Moorestown, Mount Laurel, Wilingsboro, Hainesport, Lumberton, Medford, Evesham Townships; and the portion of Shamong, Tabernacle, and Woodland Townships North of the Central Railroad of New Jersey Line; and the portion of Burlington, Westhampton, Easthampton, South Hampton and Pemberton Townships South of a line starting at the Delaware River and following the Southern boundary of Burlington Borough to the Burlington - Mount Holly Road, along this road to Mount Holly around but excluding Mount Holly to the Pennsylvania Railroad along the Pennsylvania Line through, but excluding, Pemberton, through but excluding New Lisbon to the Ocean County line and that portion south of the Central Railroad of New Jersey line running through Chatsworth); CAMDEN; CAPE MAY; CUMBERLAND; GLOUCESTER; and SALEM COUNTIES:

	Rates	Fringes
Groundman.....	\$ 27.95	52.05%
Linemen, Heavy Equipment Operators, & Cable Splicers....	\$ 32.89	52.05%

 ELEC0351-003 12/03/1994

BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER, MONMOUTH, OCEAN AND SALEM COUNTIES:

	Rates	Fringes
Line Construction: (RAILROAD ONLY)		
Dynamite Man.....	\$ 14.20	25%
Groundman Winch Operator....	\$ 13.07	25%
Groundman.....	\$ 11.06	25%
Line Equipment Mechanic.....	\$ 12.90	25%
Line Equipment Operator.....	\$ 16.20	25%
Linemen.....	\$ 16.96	25%
Street Light Mechanic.....	\$ 12.97	25%

 ELEC0400-001 06/03/2002

MONMOUTH AND OCEAN COUNTIES

	Rates	Fringes
Electrician & Cable Splicer....	\$ 36.01	40.75%

 ELEC0400-002 06/02/1997

MONMOUTH AND OCEAN COUNTIES

	Rates	Fringes
Line Construction: (Excluding Railroad construction)		

Groundman.....	\$ 27.01	18.75%+5.83
Lineman, Equipment Operator, and Cable Splicer.....	\$ 28.96	18.75%+5.83

 ELEV0005-002 08/01/2003

	Rates	Fringes
Elevator Mechanic.....	\$ 36.205	9.605+A

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day
 PAID VACATION: Employer contributes 4% of basic hourly rate as vacation pay credit for 5 years or more of service, and 2% for 6 months to 5 years of service.

 ENGI0825-002 07/01/2003

	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 33.87	18.15+A+B
GROUP 2.....	\$ 32.28	18.15+A+B
GROUP 3.....	\$ 30.37	18.15+A+B
GROUP 4.....	\$ 28.74	18.15+A+B
GROUP 5.....	\$ 27.03	18.15+A+B
GROUP 6.....	\$ 35.59	18.15+A+B

BUILDING CONSTRUCTION PROJECTS; HEAVY; HIGHWAY; ROAD;
 STREET

AND SEWER PROJECTS:

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Autograde - Combination Subgrader; base metal spreader and 7 base trimmer (CMI and similar types); autograde placer, trimmer, spreader combination (CMI and similar types); autograde slipform paver (CMI and similar types); backhoe; central power plants (all types); concrete paving machines; cranes (all types, including overhead and straddle traveling type); cranes; gantry; derricks (land or floating); drillmaster, quarrymaster (down the hole drill) rotary drill; self propelled hydraulic drill; self- powered drill; dragline; elevator graders; front end loaders (5 yds. and over); gradalls; grader; raygo; locomotive (large); mucking machines; pavement and concrete breaker, i.e.; superhammer and hoe ram; pile driver; length of boom including length of leads, shall determine premium rate applicable; roadway surface grinder; scooper (loader and shovel); shovels; tree chopper with boom; trench machines.
 GROUP 2: "A" frame; backhoe (combination); boom attachment on loaders (rate based on size of bucket) not applicable to

pipehook, boring and drilling machines; brush chopper; shredder and tree shredder; tree shearer; cableways; carryalls; concrete pump; concrete pumping system; pumpcrete and similar types; conveyors, 125 ft. and over; drill doctor including dust collector, maintenance); front end loaders (2 yds. but less than 5 yds.); graders (finisher); groove cutting machine (ride on type); header planer; hoists; (all types hoists, shall also include steam, gas, diesel, electric, air hydraulic, single and double drum, concrete brick shaft caisson, snorkel roof, and/or any other similar type hoisting machines, portable or stationary, except Chicago boom type); hoists (Chicago boom type); hydraulic cranes, 10 tons and under, hydro-axle; jacks screw air hydraulic power operated unit or console type (not hand jack or pile load test type); log skidder; pans; pavers (all concrete; pumpcrete machines; squeezecrete and concrete pumping (regardless of size); scrapers; side booms; straddle carrier; ross and similar types; winch truck (hoisting).

GROUP 3: Asphalt curbing machine; asphalt plant engineer; asphalt spreader; autograder tube finisher and texturing machine (CMI and similar types); autograde curercrete machine (CMI and similar types); autograde curb trimmer and sidewalk; shoulder; slipform (CMI and similar types); bar bending machines (power); batchers; batching plant and crusher on side; belt conveyor systems; boom type skimmer machines, bridge deck finisher; bulldozers (all); car dumpers (railroad); compressor and blower type units (used independently or mounted on dual purposes trucks, on job site or in conjunction with job site in loading and unloading of concrete, cement, fly ash, instancrete, or similar type materials); compressor (2 or 3) (battery); concrete finishing machines; concrete saws and cutters (ride on type); concrete spreaders; hetzel; rexomatic and similar types; concrete vibrators, conveyors; under 125 ft.; crushing machines; ditching machine; small (ditchwitch or similar type); dope pots (mechanical with or without pump); dumpsters elevator; fireman; fork lifts (economobile; lull and similar types of equipment); front end loaders (1 yd. and over but less than 2 yds.). generators (2 OR 3) in battery; giraffe grinders; graders and motor patrols; gunnite machines (excluding nozzle); hammer vibratory (in conjunction with generator); hoist (roof, tugger, aerial platform hoist and house cars); hoppers; hopper doors (power operated); ladders (motorized); laddervator; locomotive; dinky type; maintenance; utility man; mechanics; mixers (except paving mixers); motor patrols and graders; pavement breakers, small; self-propelled ride on

type (also maintaining compressor or hydraulic unit); pavement breaker; truck mounted; pipe bending machine (power); roller; black top; scales; power; seaman pulverizing mixer; shoulder widener; silos; skimmer machines (boom type); steel cutting machine; services and maintaining tractors; tug captain; vibrating plants (used in conjunction with unloading); welder and repair mechanics, concrete cleaning/decontamination machine operator, directional boring machine, heavy equipment robotics operator/technician, master environmental maintenance technician, ultra high pressure waterjet cutting tool system operator/maintenance technician, vacuum blasting machine operator/maintenance technician.

GROUP 4: Brooms and sweepers, chippers, compressor (single), concrete spreaders (small type), conveyor loaders (not including elevator graders), engines, large diesel (1620 H.P.) and staging pump, farm tractors; fertilizing equipment (operation and maintenance) fine grade machine (small type); form line graders (small type); front loader (under 1 yd.); generator (single); grease, gas, fuel and oil supply trucks; heaters (nelson or other type including propane, natural gas or flow-type units); lights; portable generating light plants; mixers; concrete small; mulching equipment (operation and maintenance) pumps (4 inch suction and over including submersible pumps); pumps (2 or less than 4" suction and over including submersible pumps); pumps (diesel engine and hydraulic) immaterial of power road finishing machines (small type); rollers; grade; fill or stone base; seeding equipment (operation and maintenance of); sprinkler and water pump trucks steam jennies and boilers, stone spreader; tamping machines; vibrating ride-on; temporary heating plant (nelson or other type, including propane, natural gas or flow type untis); water and sprinkler trucks; welding machines (gas, diesel, and/or electric converters of Any type, single; two or three in a battery); welding systems, multiple (rectifier transformer type); wellpoint systems.

GROUP 5: Oiler.

GORUP 6: Helicopter Pilot.

FOOTNOTES:

A. PAID HOLIDAYS: New Year's Day; Washington'd Birthday, Memorial Day; Independence Day; Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day

B. Employee receives 20% Premium Pay for Hazardous Waste Work.

ENGI0825-003 07/01/2003

	Rates	Fringes
Power Equipment Operator		

GROUP 1.....	\$ 36.36	18.15+A+B
GROUP 2.....	\$ 35.52	18.15+A+B
GROUP 3.....	\$ 37.50	18.15+A+B
GROUP 4.....	\$ 33.43	18.15+A+B
GROUP 5.....	\$ 28.22	18.15+A+B

TANK ERECTION:

FOOTNOTES:

A. PAID HOLIDAYS: New Year's Day; Washington's Birthday
Memorial Day; Independence Day; Labor Day; Veteran's Day,
Thanksgiving Day; and Christmas Day.

B. Employee receives 20% premium pay for hazardous waste
work.

TANK ERECTION CLASSIFICATIONS

GROUP 1: Operating Engineers--on all Cranes, derricks, etc.
with booms including jib 140 ft. or more above the ground.

GROUP 2: Operating Engineers--on all equipment, including
cranes derricks, etc. with booms including jib, less than 140
ft. above the ground.

GROUP 3: Helicopters--Pilot.

GROUP 4: Air compressors, welding machines and generators
(gas, diesel, or electrical driven equipment and sources of
power from a permanent plant, i.e., steam, compressed air,
hydraulic or other power, for the operating of any machine or
automatic tools used in the erection, alteration, repair and
dismantling of tanks and any and all "DUAL PURPOSE" trucks
used on the construction job site. GROUP 5: Oiler.

ENG10825-004 07/01/2003

	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 35.64	18.15+A+B
GROUP 2.....	\$ 35.73	18.15+A+B
GROUP 3.....	\$ 33.34	18.15+A+B
GROUP 4.....	\$ 30.78	18.15+A+B
GROUP 5.....	\$ 29.25	18.15+A+B
GROUP 6.....	\$ 27.49	18.15+A+B
GROUP 7.....	\$ 38.00	18.15+A+B

[STEEL ERECTION]:

FOOTNOTES:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday,
Memorial Day, Independence Day, Labor Day, Veteran's Day,
Thanksgiving Day, and Christmas Day.

B. Employees receive 20% premium pay for hazardous waste
work.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS
[STEEL ERECTION]

GROUP 1: Cranes - (all cranes, land or floating with booms including job 140 ft. and over, above ground); derricks-(all derricks, land or floating with boom including jib 140 ft. and over, above ground).

GROUP 2: Cranes - (all cranes, land or floating with booms including jib less than 140 ft. above ground); derricks (all derricks, land or floating with booms including jib, less than 140 ft. above ground).

GROUP 3: "A" frame; cherry pickers 10 tons and under; hoists; all types hoists shall also include steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, or any other similar type hoisting machines, portable or stationary, except Chicago boom type; jacks-screw air hydraulic power operated unit console type (not hand jack or pile load test type) side booms.

GROUP 4: Aerial platform used hoist; compressor, 2 or 3 in battery; elevators or house cars; conveyors and tugger hoists; fireman; forklift; generators, 2 or 3 maintenance-utility man; rod bending machine (power); welding machines--(gas or electric, 2 or 3 in battery, including diesels); captain power boats; tug master power boats.

GROUP 5: Compressor, single, welding machine, single, gas, electric converters of any type, diesel; welding system multiple (rectifier transformer type); generator, single.

GROUP 6: Oiler staddle carrier.

GROUP 7: Helicopter pilot

 ENGI0825-005 07/01/2003

	Rates	Fringes
Power equipment operators:		
GROUP 1.....	\$ 34.50	18.15+A+B
GROUP 2.....	\$ 33.85	18.15+A+B
GROUP 3.....	\$ 30.71	18.15+A+B
GROUP 4.....	\$ 29.31	18.15+A+B
GROUP 5.....	\$ 27.49	18.15+A+B
GROUP 6.....	\$ 36.43	18.15+A+B

OILOSTATIC MAINLINES & TRANSPORTATION PIPELINES:

FOOTNOTES:

A. PAID HOLIDAYS: New Year's Day; Washington's Birthday, Memorial Day; Independence Day; Labor Day; Veteran's Day, Thanksgiving Day; and Christmas Day

B. Employee receives 20% premium pay for hazardous waste work.

OILOSTATIC MAINLINES AND TRANSPORTATION PIPE

LINES

CLASSIFICATIONS

GROUP 1: Backhoe; cranes (all types); draglines; front-end loaders (5 yds. and over); gradalls; scooper (loader and shovel); koehring and trench machines.

GROUP 2: "A" frame; backhoe (combination hoe loader); boring and drilling machines; ditching machine, small; ditchwitch or similar type; fork lifts; front end loaders (2 yds and over but less than 5 yds.); graders, finish (fine); hydraulic cranes, 10 tons and under (over 10 tons - crane rate applies); side booms; and winch trucks (hoisting).

GROUP 3: Backfiller; brooms and sweepers; bulldozers; compressors (2 or 3 in battery); front-end loaders (under 2 yds.); generators; giraffe grinders; graders and motor patrols; mechanic; pipe bending machine (power); tractors; water and sprinkler trucks, welder and repair mechanic.

GROUP 4: Compressor (single); dope pots (mechanical with or without pump); dust collectors; farm tractors; pumps (4 in. suction and over); pumps (2 or less than 4 in. suction); pumps; diesel engine and hydraulic (immaterial or power); welding machines; gas or electric converters of any type, single; welding machines, gas or electric converters of any type, 2 or 3 in battery multiple welders; wellpoint systems (including installation and maintenance).

GROUP 5: Oiler, grease, gas, fuel and supply trucks and tire repair and maintenance.

GROUP 6: Helicopter-pilot.

IRON0011-001 07/01/2002

MONMOUTH AND OCEAN COUNTIES

Rates Fringes

Ironworkers:

Reinforcing.....	\$ 27.63	24.10
Structural & Ornamental.....	\$ 29.53	24.10

IRON0068-001 07/01/2003

BURLINGTON (Remainder), MERCER, MONMOUTH (South half), AND
OCEAN (Middle third) COUNTIES

Rates Fringes

Ironworkers:

Reinforcing (Concrete Rods).....	\$ 26.41	23.80
Structual, Ornamental.....	\$ 28.41	23.80

IRON0350-001 07/01/2003

ATLANTIC, CAPE MAY, CUMBERLAND (Area East of a line drawn from

Delaware Bay through the town of Cedarsville and upwards to the point where the county lines of Gloucester, Cumberland, and Atlantic meet), AND OCEAN (Remainder) COUNTIES

Rates Fringes

Ironworkers:

BUILDING CONSTRUCTION:

Fence and Guardrail

Erector.....\$ 25.92 20.25

Reinforced Concrete.....\$ 28.77 20.25

Structural & Precast.....\$ 29.77 20.25

Windows.....\$ 28.77 20.25

HIGHWAY CONSTRUCTION:

Reinforced Concrete.....\$ 26.57 20.25

Structural & Precast.....\$ 28.82 20.25

IRON0399-001 07/01/2003

BURLINGTON (Southern portion up to but not including Lumberton and Chatsworth Twps.), CAMDEN, CUMBERLAND (Remainder), GLOUCESTER, AND SALEM COUNTIES

Rates Fringes

Ironworkers:

Hazardous work.....\$ 35.44 14.25

Structural, Ornamental,
and Reinforcing.....\$ 32.44 14.25

LABO0172-001 03/01/2003

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER, MERCER, OCEAN AND SALEM COUNTIES

Rates Fringes

Laborers:

GROUP 1.....\$ 25.30 11.80+A

GROUP 2.....\$ 25.50 11.80+A

GROUP 3.....\$ 25.80 11.80+A

GROUP 4.....\$ 26.00 11.80+A

GROUP 5.....\$ 26.25 11.80+A

GROUP 6.....\$ 29.80 11.80+A

GROUP 7.....\$ 28.30 11.80+A

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day; Labor Day, Veteran's Day, Presidential Election Day, Thanksgiving Day, and Christmas Day, provided the employee works 3 days for the same Employer within a period of ten working days consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

LABORERS CLASSIFICATIONS

GROUP 1: Common laborers, landscape laborers, railroad track laborers, flagmen, salamander tenders, pitman, dumpman, waterproofing laborers, rakers and tampers on cold patch work, and wrapping and coating of all pipes.

GROUP 2: Powder carrier, magazine tender, and signalman.

GROUP 3: Sewer pipe, laser men, conduit and duct line layer, power tool operator, jack hammer, chipping hammer, pavement breaker, power buggy, concrete cutter, asphalt cutter, sheet hammer and tree cutter operators, sandblasting cutting, burning and such other power tools used to perform work usually done manually by laborers.

GROUP 4: Wagon drill operator, timberman and drill master.

GROUP 5: Finisher, manhole, catch basin or inlet builder, form setter, rammer, paver, gunite nozzleman and stonecutter.

GROUP 6: Blaster.

GROUP 7: Hazardous waste laborer.(Excludes asbestos work).

LABO0172-002 03/01/2002

Rates Fringes

Laborers:

FREE AIR TUNNEL

GROUP 1.....	\$ 27.25	12.95+A
GROUP 2.....	\$ 23.85	12.95+A
GROUP 3.....	\$ 23.70	12.95+A
GROUP 4.....	\$ 23.20	12.95+A

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day; Independence Day, Labor Day, Presidential Election Day, provided the employee works 3 days for the same Employer within a period of ten working days consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

LABORERS; FREE AIR TUNNEL

CLASSIFICATIONS

GROUP 1: Blasterers.

GROUP 2: Skilled men (including miners, drill runners, iron men, maintenance men, conveyor men, safety miners, riggers, block layers, cement finishers, rod men, caulkers, powder carriers, all other skilled men).

GROUP 3: Semi-skilled men (including chuck tenders, track men, nippers, brakemen, derail men, cable men, hose men, grout men, gravel men, form men, bell or signal men (top or bottom), form workers and movers, concrete workers, shaft men, tunnel laborers, all other semi-skilled).

GROUP 4: All others (including powder watchmen, change house attendants, top laborers).

LABO0172-003 03/01/2002
ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND,
GLOUCESTER,
MERCER, MONMOUTH, OCEAN, SALEM, AND MIDDLESEX (Southern half)
COUNTIES

	Rates	Fringes
Laborers-Asphalt Construction:		
Feeders and Dust Men.....	\$ 21.65	11.70+A
Head Rakers.....	\$ 23.60	12.95+A
Rakers & Screed Men.....	\$ 23.45	12.95+A
Scale Mixers & Burner Men.....	\$ 21.90	11.70+A
Tampers, Smothers, Kettlemen, Painters, Shovelers and Roller Boys.....	\$ 23.20	12.95+A

STREET:

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day; Independence Day; Labor Day; Veteran's Day, Presidential Election Day, Thanksgiving Day, and Christmas Day provided The Employee works 3 days for same employer within a period of ten working days consisting of five working days before and five working days after the day upon which the holiday falls or is observed.

LABO0222-001 05/01/2002
BURLINGTON (Twps. of Cinnaminson, Delance, Delran, East Hampton, Edgewater Park, Evesham, Hainesport, Lumberton, Medford, Moorestown, Mount Laurel, Pemberton, Shamong, South Hampton, Tabernacle, West Hampton, Willingsboro and Woodland);
CAMDEN; CUMBERLAND; GLOUCESTER; AND SALEM COUNTIES

	Rates	Fringes
Laborers: (BUILDING CONSTRUCTION)		
CLASS A.....	\$ 22.95	11.77
CLASS B.....	\$ 22.45	11.77
CLASS C.....	\$ 19.16	11.77

LABORERS CLASSIFICATIONS (BUILDING CONSTRUCTION)
CLASS A: Jack Hammer, Tamper, Motorized Tampers and Compactors, Street Cleaning Machines, Scaffold Builder, Hydro, Demolition Equipment, All types of Motorized Fork

Lifts Riding Motor Buggy Operator, Bobcat Operator, Mortar Man, Burners, Nozzle Man on Gunitite work.

CLASS B: All laborers not listed in Class A or C.

CLASS C: Laborers doing Janitorial-type light clean up work associated with the turnover of the project to the owner All Flagman, and those manning temporary heat of all types.

LABO0415-001 05/01/2002

ATLANTIC; BURLINGTON (Twps. of Bass River and Washington); CAPE MAY; CUMBERLAND (Twps. of Commercial, Dawne, Fairfiled, Lawrence, Maurice, and Millville); AND OCEAN (That portion up to and including Lacy Twp.) COUNTIES

Rates Fringes

Laborers: (BUILDING
CONSTRUCTION)

CLASS A.....	\$ 22.95	11.77
CLASS B.....	\$ 22.45	11.77
CLASS C.....	\$ 19.16	11.77

LABORERS CLASSIFICATIONS (BUILDING CONSTRUCTION)

CLASS A: Jack Hammer, Tamper, Motorized Tampers and Compactors, Street Cleaning Machines, Scaffold Builder, Hydro Demolition Equipment, all types of Motorized Fork Lifts, Riding Motor Buggy Operator, Bobcat Operator, Mortar Man, Burners, Nozzle Man on Gunitite work.

CLASS B: All laborers not listed in Class A or C.

CLASS C: Laborers doing Janitorial- type light clean up work associated with the turnover of the project to the owner All flagman, and those manning temporary heat of all types.

LABO0472-001 03/01/2003

MONMOUTH COUNTY

Rates Fringes

Laborers: (HEAVY AND
HIGHWAY CONSTRUCTION)

GROUP 1.....	\$ 25.30	11.80+A
GROUP 2.....	\$ 25.50	11.80+A
GROUP 3.....	\$ 25.80	11.80+A
GROUP 4.....	\$ 26.00	11.80+A
GROUP 5.....	\$ 26.25	11.80+A
GROUP 6.....	\$ 29.80	11.80+A
GROUP 7a.....	\$ 28.30	11.80+A
Group 7b.....	\$ 26.30	11.80+A

LABORERS CLASSIFICATIONS (HEAVY & HIGHWAY)

GROUP 1: Common laborers, landscape laborers, railroad track laborers, flagmen, salamander tenders, pitman, dumpman, waterproofing laborers, rakers and tampers on cold patch

work, and wrapping and coating of all pipes, & Asphalt Laborers.

GROUP 2: Powder carrier, magazine tender, signalman, asphalt raker, and asphalt screedman

GROUP 3: Sewer pipe, laser men, conduit and duct line layer, power tool operator, jack hammer, chipping hammer, pavement breaker, power buggy, concrete cutter, asphalt cutter, sheet hammer and tree cutter operators, sandblasting cutting, burning, power tool operator, and such other power tools used to perform work usually done manually by laborers.

GROUP 4: Wagon drill operator, timberman and drill master.

GROUP 5: Finisher, manhole, catch basin or inlet builder, form setter, rammer, paver, gunite nozzleman, and stone cutter

GROUP 6: Blaster.

Group 7a: Hazardous waste laborer required to wear level A,B, or C personal protection.

GROUP 7b: Certified laborer working a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A,B, or C personal protection.

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Presidential Election Day, Thanksgiving Day, and Christmas Day provided the employee works 3 days for the same employer within a period of 10 working days consisting of 5 working days before and 5 working days after the day upon which the holiday falls or is observed

LABO0595-001 05/01/2002

BURLINGTON (Remainder), MERCER, MONMOUTH, and OCEAN (Remainder)
COUNTIES:

	Rates	Fringes
Laborers: (BUILDING CONSTRUCTION)		
CLASS A.....	\$ 22.95	11.77
CLASS B.....	\$ 22.45	11.77
CLASS C.....	\$ 19.16	11.77

LABORERS CLASSIFICATIONS (BUILDING CONSTRUCTION)

CLASS A: Jack Hammer; Tamper; Motorized Tampers and Compactors Street Cleaning Machines; Scaffold Builder; Hydro Demolition Equipment; All types of Motorized Fork Lifts; Riding Motor Buggy Operator; Bob Cat Operator; Mortar Man; Burners; Nozzle Man on gunite Work.

CLASS B: All Laborers not listed in Class A or C.

Class C Laborers doing Janitorial type light clean up associated with the turnover of the project or part of a project to the owner; All Flagman; and those manning temporary heat of all types.

LABO1030-001 04/01/2001

LABORERS: (The removal, abatement, enclosure and decontamination of personal protective equipment, chemical protective clothing and machinery relating to asbestos and/or toxic and hazardous waste of materials which shall include but not necessarily be limited to: the erection, moving, servicing and dismantling to all enclosures, scaffolding, barricades, and the operation of all tools and equipment normally used in the removal or abatement of asbestos and toxic and hazardous waste or materials, the labeling, bagging, cartoning, crating, or other packaging of materials for disposal; and the clean up of the work site and all other work incidental to the removal, abatement, encapsulation, enclosure, and decontamination of asbestos or toxic and hazardous waste materials; and in addition, all work tasks involved in the maintenance and operation of energy resource recover plants (co- generation plants).)

	Rates	Fringes
Laborer.....	\$ 21.85	10.12

PAIN0252-007 05/01/2003

ATLANTIC, CAMDEN, CAPE MAY, CUMBERLAND, GLOUCESTER, SALEM, and parts of BURLINGTON and OCEAN (everything south of these cities in Burlington and Ocean Counties-Florence to Bustleton to Columbus to Jobstown to Pemberton to Onga Hat to Chatsworth to Whiting to Pinewald to Ocean Gate to Seaside Heights) COUNTIES

	Rates	Fringes
Glazier.....	\$ 27.35	15.05

PAIN0711-001 05/01/2000

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND,
 GLOUCESTER,
 MONMOUTH, OCEAN, & SALEM COUNTIES:

	Rates	Fringes
Painting, paperhanging & allied work.....	\$ 28.75	2.54+27%

Repaint work & preparation thereof (including jobs where no major alterations are taking place but excluding bridges, stacks, elevated tanks & generating stations).....	\$ 22.00	2.54+27%
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Spraying Sandblasting, Dipping, Power tools (Over 115 volts) & Paperhanging.....	\$ 31.25	2.54+27%
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PAPERHANGING PASTING APPARATUS WORK ON TANKS, BRIDGES,
 TOWERS, STACKS, & OPEN STRUCTURAL STEEL, WORK FROM CABLES &
 SWINGING SCAFFOLDS, EXTERIOR WORK ABOVE THREE STORIES

 PAIN0711-004 05/01/2000

MERCER COUNTY

	Rates	Fringes
Painters: Bridges, TV & Radio Towers, Structural Steel & Tanks above 3 stories in height (30' or over), Smoke Stacks, Water Towers, Sand- Blastin, Steam Cleaning, Spraying, or application of Hazardous Materials.....	\$ 31.25	27%+2.55
New Construction and Major Alterations.....	\$ 28.75	27%+2.55

Paperhanging.....	\$ 25.60	27%+2.55
Repaint Work.....	\$ 22.00	27%+2.55
Spraying or application of Hazardous or Dangerous Materials on Repaint Work.....	\$ 24.00	27%+2.55

PAIN0711-006 08/01/1999

	Rates	Fringes
Drywall Finisher/Taper.....	\$ 28.25	11.23

PAIN0711-007 05/01/2000

MERCER, MONMOUTH and parts of BURLINGTON AND OCEAN (everything north of these cities in BURLINGTON and OCEAN COUNTIES Florence to Bustleton to Columbus to Jobstown to Pemberton to Onge Hat to Chatsworth to Whiting to Pinewald to Ocean Gate to Seaside Heights) COUNTIES:

	Rates	Fringes
Glazier.....	\$ 28.75	10.30

PLAS0008-003 05/01/2001

CAMDEN, GLOUCESTER and SALEM COUNTIES:

	Rates	Fringes
Plasterer.....	\$ 25.35	13.40

PLAS0008-005 11/01/2001

ATLANTIC, BURLINGTON, CAPE MAY, CUMBERLAND, MERCER, MONMOUTH & OCEAN COUNTIES:

	Rates	Fringes
Plasterer.....	\$ 28.50	13.40

PLAS0699-001 05/01/2002

CAMDEN, GLOUCESTER, AND SALEM COUNTIES

	Rates	Fringes
Cement Mason.....	\$ 27.30	12.55

* PLUM0009-003 03/01/2004

	Rates	Fringes
Air Conditioning & Refrigeration Mechanic.....	\$ 26.92	11.33

SCOPE OF WORK: Installation of air conditioning and refrigeration equipment whose combined tonnage does not exceed 15 tons. Installation of water cooled air conditioning that does not exceed 10 tons (includes piping of compenent system and erection of water tower). Installation of air cooled air conditioning that does not exceed 15 tons. Installation of air conditioning equipment of the "Package-Unitary" rooftop type, the combined tonnage of which does not exceed 35 tons. Packaged Unitary Air Conditioning and Refreigeration Institute (ARI) as follows: "A unitary air conditioner consists of one or more cooling coil, and air moving device, a cpmpressor and condenser combination, and may include a heating function as well". Any and all related piping to the above installation will be done under the appropriate trade jurisdiction.

PLUM0009-004 07/01/2003

BURLINGTON (from the town of Burlington City, to everything north along County Road Route 541 East also known as High Street, until it reaches the city of Mount Holly which is also Local 9 territory, Madison Avenue in Mount Holly to State Road Route 38 East, again everything north along State Road Route 38 East until its cross over, State Road Route 206 and becomes County Road Route 530, continuing on including Pemberton Boro to south on Magnolia Road in Pemberton Township to Magnolia New Lisbon Road (Route 545), to south on Mount Holly Misery Road to State Road Route 70 East to the Ocean County Line),

MERCER, MONMOUTH, AND OCEAN COUNTIES:

	Rates	Fringes
Plumber/Pipefitter.....	\$ 36.88	17.00

PLUM0322-001 05/01/2003

ATLANTIC; BURLINGTON (Remainder) CAMDEN; CAPE MAY; CUMBERLAND;
GLOUCESTER; AND SALEM COUNTIES

	Rates	Fringes
Plumber/Pipefitter.....	\$ 32.12	18.69

ROOF0004-001 06/01/2002

MONMOUTH COUNTY (Remainder), AND OCEAN (Remainder) COUNTIES

	Rates	Fringes
Roofer.....	\$ 29.57	12.75

ROOF0030-004 05/01/2002

ATLANTIC, BURLINGTON, CAMDEN, CAPE MAY, CUMBERLAND,
GLOUCESTER,
MERCER AND SALEM COUNTIES; and the following portions of
MONMOUTH AND OCEAN COUNTIES: West of a line starting from the
point on Route 70 where Burlington and Ocean Counties meet,
Easterly along Route 70 to Route 571, along Route 571 to
Cassville, Easterly on Route 528 to Van Hiseville, Northerly on
Route 527 to Manalapan, Westerly on Route 33 to the Monmouth
County Line

	Rates	Fringes
Roofers:		
All other work.....	\$ 26.00	13.05+A
Shingle, slate and tile.....	\$ 19.25	6.17

FOOTNOTE: A. PAID HOLIDAY: Election Day

SFNJ0669-002 01/01/2004

ATLANTIC, BURLINGTON, CAPE MAY, CUMBERLAND, MERCER (Remainder),
MONMOUTH, OCEAN, AND SALEM (Remainder) COUNTIES

	Rates	Fringes
Sprinkler Fitter.....	\$ 34.30	6.15

SFNJ0692-001 05/01/2003

CAMDEN, GLOUCESTER, MERCER (Town of Trenton), AND SALEM (Penns
Grove, excluding Penns Grove Airport) COUNTIES

	Rates	Fringes
Sprinkler Fitter.....	\$ 37.27	11.80

SHEE0019-010 05/01/2003

CAMDEN, GLOUCESTER, & SALEM COUNTIES:

	Rates	Fringes
Sheet metal worker.....	\$ 33.18	17.90+H

H-Election Day is a paid holiday.

SHEE0027-002 01/01/2004

ATLANTIC, BURLINGTON, CAPE MAY, CUMBERLAND, MERCER,
MONMOUTH
AND OCEAN COUNTIES

	Rates	Fringes
Sheet metal worker.....	\$ 34.20	21.10

SUNJ1993-001 12/07/1993

MERCER COUNTY

	Rates	Fringes
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Cement Mason (BUILDING
 CONSTRUCTION ONLY).....\$ 19.60 8.83

 TEAM0331-001 01/01/2004

ATLANTIC AND CAPE MAY COUNTIES

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 22.00	14.43+A+B
GROUP 2.....	\$ 22.15	14.43+A+B
GROUP 3.....	\$ 22.35	14.43+A+B
GROUP 4.....	\$ 22.50	14.43+A+B

FOOTNOTE:

A. PAID HOLIDAYS: New Year's Day; Washington's Birthday;
 Memorial Day; Independence Day; Labor Day; Veteran's Day;
 Presidential Election Day; Thanksgiving Day;& Christmas Day;
 provided the employee works 3 days in the week in which the
 holiday falls.

B. BREAVEMENT LEAVE: Any employee having a death in their
 immediate family, which shall be parents,spouse,children
 blood brothers or sisters,mother-in-law,and father-in-law
 shall be given three (3) days time off with pay at the time
 of death upon furnishing proof of said death. The provision
 shall also apply to grandparents,when living with the
 employee.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Striaht Truck Driver,Dump Truck Driver,Water Truck
 Driver,Transit Mix Driver,Pickup Truck Driver,Tank Truck
 Driver Track Truck Driver,Agitator Truck Driver,Concrete
 Mobile Unit Driver,Tringer Bead Truck Driver,Ross Carrier
 Driver,Warehouse Forklift Driver,A Frame Truck Driver,Gin
 Pole Truck Driver, Form Truck Driver,Driver for Truck having
 Self Loading/Unloading Attachment,& Vacuum Truck/Trailer.

GROUP 2:Trucks Towing Driver

GROUP 3:Trailer Truck Driver,Winch Truck Driver,Off Road Dump
 Truck Driver,Fuel Truck Driver,Tractor Trailer(any trailer

driver), Asphalt Oil Distributor Driver, & Off Road Water Truck Driver.

GROUP 4: Mechanics.

TEAM0469-002 05/01/2000

BURLINGTON (Remainder), MERCER, MONMOUTH, AND OCEAN COUNTIES

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 26.35	11.835+A
GROUP 2.....	\$ 26.40	11.835+A
GROUP 3.....	\$ 26.50	11.835+A
GROUP 4.....	\$ 26.60	11.835+A

FOOTNOTE:

A. Employees working or receiving pay for 80 days within a year receive one week's paid vacation (48 hours); 125 days receive two weeks' vacation (96 hours); 145 days receive 15 days (120 hours); 15 years seniority and 145 days receive 4 weeks vacation (160 hours).

PAID HOLIDAYS: New Year's Day; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Columbus Day; Veteran's Day, General Election Day; Thanksgiving Day; and Christmas Day provided the employee has been assigned to work or "shapes" one day of the calendar week during which the holiday falls. Employee receives \$3.00 per hour premium pay for hazardous waste work.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Drivers on the following type vehicles: straight dumps, flats, floats, pick-ups, container haulers, fuel, water sprinkler, road oil, stringer, bead, hot pass, bus dumpcrete, transit mixers, agitator mixer, half truck, winch truck, side-0- matic, dynamite, power, x-ray, welding, skid, jeep, station wagon, stringer, A-frame, all dual purpose trucks, truck with mechanical tailgate, asphalt distributor, batch trucks, seeding, mulching, fertilizer, air compressor trucks (in transit), parts chaser, escort, scissor, Hi-lift, telescope, concrete breaker, gin pole, stone, sand, asphalt distributor and spreader, nipper, fuel trucks (drivers on fuel trucks, including handling of unit), skid truck (debris container - entire unit), concrete mobile trucks (entire

unit), expediter (parts chaser), beltcrete trucks, pumpcrete trucks, line truck, reel truck, wreckers, utility trucks, tank trucks, warehousemen, warehouse partsmen, yardmen, lift truck in warehouse, warehouse clerk, parts man, material checkers, receivers shippers, binning men (materials cardex man); drivers on the following type vehicle: broyhill coal tar epoxy trucks, little-ford bituminous distributor, slurry seal truck or vehicle, thiokol trackmaster pick-up (swamp cat pickup, bucket loader dump truck and any rubber-tired tractor used in pulling and towing farm wagons and trailers of any description, similar type vehicles); off-site and on-site repair shop, team drivers, vacuum or vac-all trucks (entire unit)

GROUP 2: Drivers on straight 3-axle materials; truck and floats

GROUP 3: Drivers on all euclid-type vehicles; euclids, international harvesters, wabcos, caterpillar, koehring, tractors, and wagons, dumptors, straight, bottom, rear and side dumps, carryalls and scrapers (not self-loading - loading over the top), water sprinkler, trailers, water pulls and similar types of vehicles; drivers on tractors and trailer type vehicles; flat, floats, I-beam, low beds, water sprinkler, bituminous transit mix, road oil, fuel bottom dump hopper, rear dump, office shanty, epoxy, asphalt, agitator mixer, mulching, stringer, seeding, fertilizing pole spread, bituminous distributor, water pulls (entire unit) (tractor trailer), reel trailer and similar types of vehicles

GROUP 4: Winch Trailer Drivers

 TEAM0676-001 05/01/2003

BURLINGTON (Area West of the NJ Turnpike to the Delaware River), CAMDEN, CUMBERLAND, GLOUCESTER AND SALEM COUNTIES

	Rates	Fringes
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Truck drivers:

GROUP 1.....	\$ 23.25	11.6875+A+B
GROUP 2.....	\$ 23.30	11.6875+A+B
GROUP 3.....	\$ 23.45	11.6875+A+B
GROUP 4.....	\$ 23.65	11.6875+A+B
GROUP 5.....	\$ 23.80	11.6875+A+B

FOOTNOTES:

A. Employee who has worked or received pay for 90 days within a year prior to his anniversary date shall receive 56 hours straight time vacation pay; for 3 years but less than 8 years of service he will receive 100 hours of straight time vacation pay; 15 years or more he will receive 165 hours of straight time vacation pay.

B. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Presidential Election Day, Thanksgiving Day, Christmas Day, and two personal holidays, Good Friday, and Christmas Eve afternoon (provided employee works that morning) on the condition that the employee works or is available for work on at least two days in the week in which the holiday occurs.

C. Truck drivers, on hazardous waste removal work on a state or federally designated hazardous waste site where the truck driver is in direct contact with hazardous materials and when personal protective equipment is required for respiratory, skin and eye protection the teamster shall receive \$2.25 per hour in addition to the regular rate of pay including overtime pay.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Warehouseman

GROUP 2: Dump truck, water truck, transit mix, pickup, tank, track, agitator, concrete mobile unit, dytinger bead, tack rig, ross carrier, warehouse forklift, A-frame, gin pole form truck, truck having self loading/unloading attachment, straight

GROUP 3: Truckstowing

GROUP 4: Trailer winch off road dump, fuel, tractor trailer, asphalt oil distributor, off road water truck

GROUP 5: Mechanics

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: NJ030006 06/13/2003

General Decision Number: NJ030006 06/13/2003

Superseded General Decision No. NJ020006

State: New Jersey

Construction Type:

DREDGING

County(ies):

STATEWIDE

All Dredging except self propelled hopper dredges, on the Atlantic Coast & tributary waters emptying into the Atlantic Ocean.

Modification Number Publication Date

0 06/13/2003

COUNTY(ies):

STATEWIDE

ENGI0025D 10/01/2002

	Rates	Fringes
DIPPER & CLAMSHELL DREDGE:		
Operator	28.07	6.45+a+b
Engineer	24.72	6.45+a+b
Maintenance Engineer	23.59	5.85+a+b
Welder	23.22	5.85+a+b
Mate	21.99	5.85+a+b
Boat Master	23.24	6.45+a+b
Boat Captain	22.15	5.85+a+b
Oiler	18.59	5.25+a+b
Deckhand; Tug Deckhand	18.13	5.25+a+b
Scowman	17.88	5.25+a+b
DRAG BUCKET DREDGE:		
Operator	25.09	6.45+a+b
Engineer	21.41	6.45+a+b
Maintenance Engineer	21.21	5.85+a+b
Mate	19.82	5.85+a+b
Deckhand	16.17	5.25+a+b
HYDRAULIC DREDGES:		
Leverman	27.56	6.45+a+b
Engineer; Derrick Operator	24.17	6.45+a+b
Chief Mate	23.82	6.45+a+b
Chief Welder	24.48	6.45+a+b
Maintenance Engineer	23.59	5.85+a+b
Electrician	23.43	6.45+a+b
Welder Dredge	23.21	5.85+a+b
Spider Barge Operator	23.01	5.85+a+b

Mate	21.99	5.85+a+b
Boat Master	23.23	6.45+a+b
Boat Captain	21.66	5.85+a+b
Steward	21.94	6.45+a+b
Oiler	18.59	5.25+a+b
Deckhand	17.90	5.25+a+b
Tug Deckhand	18.13	5.25+a+b
Shoreman	17.90	5.25+a+b
Assistant Cook	18.00	5.25+a+b
Night Cook	18.00	5.25+a+b
Messman	17.49	5.25+a+b
Janitor/Porter	17.49	5.25+a+b
Fill Placer	23.82	6.45+a+b
Assistant Fill Placer	21.80	6.45+a+b
COMPANY LEAD DREDGEMAN:		
Lead Dredgeman	27.56	6.45+a+b
TUG BOATS over 1,000 H.P. (with master or captain having license endorsed for 200 miles off shore):		
Tug Master	24.68	6.45+a+b
Tug Captain	23.69	6.45+a+b
Tug Chief Engineer	22.95	5.85+a+b
Tug Engineer	22.48	5.85+a+b
Tug Deckhand	18.13	5.85+a+b
TUG BOATS over 1,000 H.P. (without master or captain having license endorsed for 200 miles off shore):		
Tug Master	23.23	6.45+a+b
Tug Captain	22.15	5.85+a+b
Tug Engineer	22.48	5.85+a+b
Tug Deckhand	18.13	5.25+a+b
DRILL BOATS:		
Engineer	23.54	6.45+a+b
Blaster	23.81	6.45+a+b
Driller	23.55	6.45+a+b
Welder	23.30	5.85+a+b
Machinist	23.30	5.85+a+b
Tug Master	20.48	6.45+a+b
Tug Captain	19.53	5.85+a+b
Oiler	20.46	5.25+a+b
Tug Deckhand	15.97	5.25+a+b
Core Driller	18.56	5.25+a+b
DIVERS:		
Diver	40.88	6.45+a+b
Standby Diver	27.20	6.45+a+b
Tender	31.46	6.45+a+b

Standby Tender	22.61	5.85+a+b
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DREDGING PIPELINE CABLE-LAYING:

Leverman	28.18	6.45+a+b
Control Tower Operator	24.90	6.45+a+b
Rigger	18.42	5.25+a+b
Line up Operator, End Prep.	17.82	5.25+a+b
Diver	41.77	6.45+a+b
Diver Tender	25.93	6.45+a+b

ENGINEER:

1st	24.90	6.45+a+b
2nd, 3rd & 4th	24.58	6.45+a+b
Electrician	24.48	6.45+a+b
Electro Hydro Tech.	20.14	5.85+a+b
Tug Master	26.15	6.45+a+b
Tug Captain	22.79	6.45+a+b

PREMIUMS: Additional 20% for hazardous material work

FOOTNOTES APPLICABLE TO ABOVE CRAFTS:

- a. PAID HOLIDAYS: New Year's Day, Martin Luther King Day, Memorial Day, Good Friday, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, and Christmas Day
- b. VACATION: Seven percent (7%) of the straight time rate multiplied by the total hours worked.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
 - * an existing published wage determination
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 - * a conformance (additional classification and rate)

ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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U. S. Department of Labor
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Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

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SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.1 DESCRIPTION OF THE CONTRACT WORK

Contract work includes placement of approximately 1,800,000 cubic yards of beachfill in Cape May City, Cape May Meadows and Cape May Point. Beachfill will be required in the following areas as indicated on the contract drawings:

- Area 1: Baseline No. 1 - Station 0+00 to 196+90
- Area 2: Baseline No. 2 - Station 67+50 to 118+61
- Area 3: Baseline No. 2 - Station 67+50 to 7+52

The work also includes, in addition to beachfill: the extension of stormwater outfalls including pipe support systems; the construction of pedestrian, vehicle, and handicap dune crossovers; construction of an access road; planting dune grass; and providing sand fence.

The contract drawings include separate Survey Baselines for Cape May City (Area 1), and Cape May Meadows/Point (Areas 2 and 3). In addition the drawings show a Construction Baseline for Cape May City. All references to "Baselines" throughout the specifications shall be taken to mean "Survey Baselines" unless specifically referenced to the "Construction Baseline".

1.1.1 Base Bid

The base bid portion of the work includes placing beachfill in Areas 1 and 2. At this time, beachfill may not required in Area No. 1 between Stations 39+45 and 60+80, 90+00 and 196+90 of Baseline No. 1. The pre-placement condition surveys will determine if beachfill is to be placed between these stations. For bid purposes, the Contractor shall assume that the Base Bid quantities shall be placed anywhere in Area No. 1 between stations 0+00 and 196+90 of Baseline No. 1.

1.1.2 Optional Work

Option No. 1 includes placing beachfill in Area No. 3 which, if awarded, will be performed using Fiscal year 2005 funds. The award of this option is dependent upon reservations of funds from future appropriations, and from future contribution to the project having one or more non-federal project sponsors.

Option Nos. 2 through 5 consist of separate options to place additional beachfill. Option work will be awarded if the Contracting Officer determines that additional beachfill is required, based on the results of pre-placement condition surveys and changing site conditions as they occur during the contract period. Where additional beachfill is required, the option work would be placed immediately after the bid quantity in a particular area to achieve the template shown on the contract drawings.

1.1.3 Borrow Areas

The borrow areas for beachfill material is located offshore of the beach,

south of the project location.

1.2 REQUIRED ORDER OF WORK

Beachfill required under the base bid shall commence in Area No. 1. ***Work may proceed in a manner to consider the Small Arms Range restrictions as stated in Section 02390.*** Upon completion of beachfill in Area No. 1, beachfill shall then start in Area No. 2 at Station 67+50 of Baseline No. 2 and proceed north westward to Station 118+61.

Beachfill required under Option No. 1 shall commence in Area No. 3 at Station 67+50 of Baseline No. 2 and proceed eastward to Station 7+52.

1.3 GENERAL RESTRICTIONS ON WORK

The contractor will not be permitted access to any areas of the beach for beachfill operations until 15 August 2004. Surveying operations will be permitted prior to this date.

Beachfill will not be permitted in Cape May City (Station 78+00 to 196+90 of survey baseline No. 1) until after 6 September 2004.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION 02390

BEACHFILL

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for conducting pre-placement condition surveys, removal of the material from Borrow Area(s) located offshore, and placing the material on the beach and in the scour hole within the limits specified herein and shown on the drawings.

1.2 REFERENCES

The following references form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 422 (1990) Standard Method for Particle-Size
Analysis of Soils

CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 156 Oil and Hazardous Material Transfer
Operations

U.S. ARMY CORPS OF ENGINEERS (COE-SOH)

EM 385-1-1 (Latest Rev.) Safety and Health
Requirements Manual

1.3 REQUIRED ORDER OF WORK

The order of work shall be as specified in Section 01010 SUMMARY OF WORK.

1.4 CHARACTER AND LOCATION OF BORROW MATERIAL

1.4.1 Character of Borrow Material

The character of the material in Borrow Area(s) is believed to be as indicated by the results of Government-conducted sampling. Particle Size Distribution Curves and Gradation Curves are included in Section 00855, and Vibracore Logs are included on the drawings of this contract. The locations of the vibracore holes in the borrow areas are also shown on the drawings.

1.4.2 Location of Borrow Areas

The location of the borrow areas and the limits to which removal of material is permitted is shown on the drawings. The maximum allowable depth for removal of material from the borrow areas is as follows: -54 feet North American Vertical Datum (NAVD 88) for Borrow Areas 4 and -44 feet (NAVD 88)

for Borrow Area 5. Unless specifically directed by the Contracting Officer, no payment will be made for material removed from outside the limits of each borrow area.

1.4.3 Nature of Borrow Areas

The surveys of the borrow areas included in the plans were taken March 2004. However, the borrow area conditions are dynamic in nature, and the soundings in the plans may not be an accurate representation of the depths and conditions existing at the commencement of dredging operations in this contract. Before-dredging surveys and after-dredging surveys shall be conducted, as specified in Section 01720 SURVEY REQUIREMENTS.

Based on previous dredging in the borrow area, cobbles and/or other non-beachfill material having a 3-inch or greater diameter, have been found in the borrow area. The contractor shall submit a work plan that demonstrates to the satisfaction of the Contracting Officer, or his representative, that the proposed dredging method will exclude non-beachfill material with any dimension in excess of 1 inch from passing through to the area of sand placement. Any disposal of non-beachfill material associated with this work plan shall require disposal outside the beach and borrow area limits and shall be at no additional cost to the government.

The information depicted on the vibrocore logs represent the results of subsurface explorations made on the dates indicated and can only be considered as conditions existing at that time.

1.5 SITE CONDITIONS

Bidders are expected to examine the site of the work in accordance with Contract Clause: SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK to determine the conditions affecting their operations. The entire work site is designated as a hard hat area in accordance with EM 385-1-1. Access to the beachfill site is available at the locations shown on the drawings. The Contractor shall be responsible for compliance with all applicable Federal, State, County, and local regulations regarding weight limitations and other vehicle restrictions regarding the use of these routes. The beach area in front of the Small Arms Range extending from Station -0+60 to Station 13+20 of Baseline No. 1 will be inaccessible to the Contractor between the hours of 7:00 a.m. and 4:30 p.m., Monday through Thursday, due to training operations and field firing of weapons. During these restricted times, a red flag will be displayed on the range flagpole. However, changes in this schedule may occur during the contract period. The Contractor shall coordinate with the U.S. Coast Guard point of contact listed in Section 01500: TEMPORARY CONSTRUCTION to determine any deviations from the above schedule. The Contractor shall schedule work in accordance with this restriction.

1.6 FUEL OIL HANDLING

The Contractor shall assure that all fuel oil transfer operations to or from his plant comply with all applicable Federal, State, and municipal laws, codes, and regulations. The Contractor shall incorporate in his accident prevention plan, required under Contract Clause: ACCIDENT PREVENTION, sufficient information to demonstrate compliance with 33 CFR 156 and all other applicable laws, codes, and regulations.

1.7 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Work Plan; G,DO.

The Contractor shall describe his proposed personnel, equipment, and methods for accomplishing the contract work including all option work (when and if awarded), and include the proposed methods for dune construction, existing dune excavation and access road construction. The Contractor shall include his proposed method for maintaining existing outfall drainage throughout the contract period.

The Contractor shall submit a separate work plan including a detailed description of Equipment and Procedures to be used to fill the beachfill template and scour hole in Area #2, as shown on the drawings, from approximate stations 79+00 to 88+00.

Debris Prevention Plan; G,COR.

The Contractor shall devise a means and a monitoring program/method to ensure that debris is not deposited upon the beach and buried by beachfill material.

Qualifications; G,COR.

Provide qualifications of licensed surveyor for land and hydrographic surveying.

Pumpout Plan; G,COR.

If a hopper dredge is used for the contract work, the Contractor shall submit to the Contracting Officer for approval, prior to the start of work, its plan for pumpout of excavated material from the dredge to the beachfill area. The plan shall include the description, dimensions, and location of the proposed mooring facility.

Grade Stake Recovery Plan; G,COR.

Contractor shall submit a plan describing his procedures that will be used to ensure that all grade stakes placed on the beach during construction are subsequently removed.

SD-02 Shop Drawings

Borrow Areas; G,DO.

The Contractor shall provide a map of the borrow area, to scale, with the Contractor-assigned stationing and range information. This map will be used by the Government to identify the location of dredging on a daily basis. The Contractor shall indicate on

that mapping which corner of the borrow area is 0,0.

SD-06 Test Reports

DGPS Positioning.

Records of position during dredging and overboard disposal operations shall be recorded on disk every 15 minutes and submitted to the Contracting Officer on a daily basis.

Test Reports; G,COR.

Copies of all laboratory and field test reports shall be submitted to the Contracting Officer within one week after completion of each test.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 DESCRIPTION OF WORK, REQUIRED ORDER OF WORK, AND RESTRICTIONS ON WORK

See Section 01010 SUMMARY OF WORK for "Description Of Work," "Required Order Of Work," and "Restrictions On Work."

3.2 DEDICATED PUBLIC SAFETY PERSONNEL

The Contractor shall provide a minimum of two public safety persons to patrol the perimeter of the closed beach area and direct the public to not enter the construction area. They shall have no other responsibilities. They shall be easily identified by wearing safety vests. These dedicated public safety personnel shall be provided between 8:00 am and 5:00 pm, during active construction operations.

3.3 PRE-PLACEMENT CONDITION SURVEYS

Pre-placement condition surveys shall be performed as specified in Section 01720 SURVEY REQUIREMENTS. Commencement of beachfill will not be permitted until the survey data from these surveys has been submitted, reviewed, and approved by the government.

3.4 CONSTRUCTION BASELINE - AREA NO. 1

The Contractor shall establish a construction baseline on the seaward side of the bulkhead or dune. The construction baseline shall be defined by station and offset from the design baseline indicated on the contract drawings. The Contractor shall stake the construction baseline for use by the Contractor's and Government personnel.

3.5 PLACEMENT OF BEACHFILL

3.5.1 General

Beachfill material shall be placed and shaped to the beachfill template lines, grades, slopes, and elevations shown on the drawings. There shall be no pronounced ridges or wash holes in the final grades and slopes unless otherwise indicated. A vertical tolerance of plus 0.0 feet and minus 0.2 feet will be permitted in the grades and slopes, above elevation -2.8 NAVD 88 (mean low water). Below elevation -2.8 NAVD 88 (mean low water), the

beachfill may be placed at a slope steeper, but not flatter, than the slopes shown on the drawings. ***In addition, from approximate stations 79+00 to 88+00 (scour hole), the Contractor shall fill the scour hole to elevation -35 NAVD 88.*** The Contractor shall conduct his work operations so that no areas outside of the work limits shown on the drawings are disturbed. A spreader section shall be used at the discharge end of the pipeline for uniform distribution of the beachfill material. Land-based equipment shall be used for grading the beachfill material.

All material shall be hydraulically placed. If the Contractor stockpiles material and subsequently uses land-based equipment to move the material to its final position, the Contractor shall wait 24 hours before after-surveys are conducted of that area.

During the operation of placing beachfill material, all debris resulting from construction operations shall be removed from the work site and disposed of at the Contractor's expense. Such disposal shall comply with all applicable Federal, state, and local laws. Such materials shall be removed from the site of the work before the date of completion of the work under these specifications.

3.5.2 Restrictions on Beachfill Operations

The Contractor will be allowed to close the beach, utilizing temporary fencing, barricades, and signage, in 2000 foot sections to allow placement of beachfill. Acceptance of beachfill will be made in 1000 foot sections. After acceptance of a section, the Contractor shall advance the closed section of beach. All other sections of the beach, except staging areas, are to remain open to the general public. Ramps must be provided over the pipeline to allow public access to the ocean. The Contractor shall ensure that any movement of pipeline or equipment is done, with recognition to the public presence, in accordance with the approved Accident Prevention Plan.

3.5.3 Placement of Beachfill Beneath Existing Beach Structures

Placement and grading of beachfill material by hand may be required beneath existing beach structures. The Contractor shall protect the existing beach structures from damage. Placement of beachfill material beneath structures shall be done in a manner that minimizes the ponding of water. If ponded areas are created due to the Contractor's operations the Contractor shall pump these areas dry at no expense to the Government. Beachfill will not be permitted to be placed on any infrastructure, decks, pavillions, etc., unless directed by the Contracting Officer. Any structures damaged shall be repaired at the expense of the Contractor.

3.5.4 Outfall Drainage

The Contractor shall maintain drainage of all outfalls at all times throughout the duration of the contract.

3.5.5 Hydraulic and Hopper Dredges

All pipelines used with hydraulic dredges shall be kept in good condition at all times, and any leaks or breaks shall be promptly repaired. Material excavated by hopper dredge shall be loaded into bins or hoppers. The material shall be pumped directly to the beachfill area by a means which will prevent the loss of any material into the ocean. Special care shall be taken to assure that hoppers do not leak during any phase of the contract work.

3.5.6 Accident Prevention Plan

Barricades, warning signs, and lights shall be provided by the Contractor, subject to the approval of the Contracting Officer as part of the accident prevention plan, for the protection and safety of the public using the adjacent beach areas. The beachfill dredge pipe shall be clearly marked with buoy signs or other signage approved by the Contracting Officer at a distance of 200 feet seaward of the low water line at all locations that the dredge pipe is landed. This sign shall warn the public of the location and danger of the submerged pipe. All barricades, warning signs, and lights shall be installed prior to the start of any work.

3.5.7 Removal of Stakes and Markers

The Contractor shall remove all stakes, markers, temporary fencing, burlap, or other items used in the construction of the beach immediately after completion and before approval of an acceptance section, or as otherwise directed by the Contracting Officer. All stakes, markers, temporary fencing, burlap, or other items used in the construction that become uncovered after approval of the acceptance section shall be removed immediately.

3.6 CONTRACTOR QUALITY CONTROL

3.6.1 Contractor Reports

The Contractor shall prepare and maintain Daily Report of Operations forms, and shall furnish signed copies thereof with the daily Quality Control Records required in Section 01450 CONTRACTOR QUALITY CONTROL to the Contracting Officer. Copies of the Daily Construction Quality Report and Report of Operations forms to be used are attached to the end of that section. The Contractor shall indicate on the these daily forms the location and depth of dredging in the borrow area. The location shall be easily located on the map of the borrow area provided as a submittal.

3.6.2 Samples and Testing

The Contractor shall obtain samples of beachfill material from the finished beach at 500 foot intervals not more than two days following placement and final grading of beachfill and have them tested for grain size distribution in accordance with ASTM D 422. All testing shall be performed by a Corps of Engineers approved laboratory as specified in SECTION 01450: CONTRACTOR QUALITY CONTROL. Samples shall be obtained at approximately +3 feet NAVD, on the beachfill slope. The Contractor shall collect no more than five samples of beachfill material before sending the samples to the laboratory.

The results of each test shall be recorded on ENG Form 2087, a copy of which is included in SECTION 00840 of this contract. The Contractor shall also record on ENG Form 2087 the location of the dredge within the borrow area and the depth of dredging at the time of placement of the sand sampled.

3.6.3 Form Preparation

Instructions regarding the preparation of all required forms will be provided at the Contractor Quality Control Coordination Meeting.

3.7 MEASUREMENT AND PAYMENT

3.7.1 Mobilization and Demobilization

All costs connected with the mobilization and demobilization of the Contractor's plant and equipment will be paid for at the lump sum price for this item as listed in the Bidding Schedule. Sixty percent (60%) of the lump sum price will be paid to the Contractor upon completion of his mobilization at the work site. The remaining forty percent (40%) will be included in the final payment for work under this contract.

3.7.1.1 Contractor Furnished Cost Data

In the event the Contracting Officer considers that the amount in this item (sixty percent) which represents mobilization, does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid price. Failure to justify such price to the satisfaction of the Contracting Officer will result in the payment of actual mobilization costs, as determined by the Contracting Officer, at the completion of mobilization. The payment of the remainder of this item will be included in the final payment under the contract. The determination of the Contracting Officer in these circumstances is not subject to appeal.

3.7.1.2 Mobilization and Demobilization Costs for Base Bid

All costs in connection with the mobilization and demobilization of the Contractor's plant and equipment as defined below shall be included in the contract lump sum price for Base Bid Item No. 1a "Mobilization and Demobilization".

a. Mobilization shall include all costs for operations accomplished prior to commencement of actual beachfill placement; that is transfer of all plant and equipment to the work site, initial installation of pipelines, and all other incidentals in advance of beachfill placement operations.

b. Demobilization shall include general preparation for transfer of the plant and equipment to the Contractor's home or standby base, removal of pipelines, cleanup, and the transfer of plant and equipment to the home or standby base.

3.7.2 Placement of Beachfill for Base Bid and Options 1, 2, 3, 4 and 5

Beachfill material placed in the designated area within the allowable tolerance will be measured for payment by the cubic yard in place on the beach. The total number of cubic yards placed will be computed by the average-end-area method from cross-section surveys taken by the Contractor before and after beachfill operations, as specified in Section 01720 SURVEY REQUIREMENTS and as required by Special Clause: QUANTITY SURVEYS. The volume so computed will be the pay quantity for the contract. A deduction of one cubic yard will be made from the pay quantity for every cubic yard of material removed below the following elevations for the associated borrow areas: -54 feet (NAVD 88) for Borrow Area 4 and -44 feet (NAVD) for Borrow Area 5. This deduction will be based on before-dredging surveys and after-dredging surveys. Payment for placing and grading the beachfill material will be made at the contract unit price per cubic yard for Base Bid Item No. 1b, "Beachfill" and Bid Item Nos. 2a, 3, 4, 5 and 6 (If Options 1, 2, 3, 4 and/or 5 are awarded). Payment for these Bid Items shall also include full compensation to the Contractor for conducting

pre-placement condition surveys, maintaining drainage of the outfall pipes, beachfill testing, and performing all surveys of the borrow area and the surveys required for quantity computations.

-- End of Section --

SECTION 02446

SAND FENCE AND DUNE GRASS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all operations required for the erection of sand fence and the planting and seeding of dune grass, as specified herein and shown on the drawings.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Sand Fence. Dune Grass Plants and Seed.

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

PART 2 PRODUCTS

2.1 SAND FENCE

2.1.1 Fence

Fence shall be a wood picket fence. Pickets shall be No. 1 white cedar. Pickets shall be relatively free of large knots and other structural defects. Binding wire shall be 19 gauge soft galvanized wire. Fence shall be stretched after weaving to ensure the pickets are tightly bound by the wire. Fence shall be furnished in 50-foot minimum lengths and shall be unpainted.

2.1.2 Fence Posts

Fencing shall be supported by 3" to 5" diameter cedar sawn round wood posts, 8-feet in length. Wood posts shall be **untreated**.

2.2 DUNE GRASS

2.2.1 Plants

Plants shall be the Cape variety of American Beachgrass (*Ammophila breviligulata*). Each plant shall consist of two or more healthy culms. Plants which are damaged will not be accepted.

2.2.2 Seed

Seed shall be the Atlantic variety of coastal panicgrass (*Panicum amarum*).

2.2.3 Fertilizer

Fertilizer shall be 10-10-10 grade. Fertilizer shall be uniform in composition, free-flowing, and suitable for application with approved equipment.

PART 3 EXECUTION

3.1 SAND FENCE

The sand fence shall be erected in such a manner as to accumulate wind blown sand and thereby aid in the formation of a dune. Fence shall be erected in the locations and along the lines shown on the drawings. Posts shall be provided at a maximum spacing of 10 feet and shall be driven 4 feet into the ground. Fence shall be secured to posts with bottom portion of fence touching the ground surface. Fence shall be lashed to posts at the same locations as the picket bindings with an overhand knot of 14 gauge soft galvanized wire or equivalent strength staples.

3.2 DUNE GRASS

3.2.1 General

The dunes shall be fertilized, planted, and seeded with beachgrass and panicgrass after construction of the dune has been completed.

3.2.2 Surface Preparation

All surfaces to be planted shall be graded with no sharp depressions greater than 2 inches in depth. All compacted areas shall be scarified to a depth of 3 inches prior to planting.

3.2.3 Planting Method

3.2.3.1 Beachgrass

One beachgrass plant shall be planted per hole. The plants shall be spaced 18 inches apart within a row and rows shall be spaced 18 inches apart. The ends of rows shall be staggered 9 inches. The dune grass shall be planted in 8-9" deep holes. Fertilizer shall be applied at 400 pounds per acre, 30 days after planting, but no earlier than April 1.

3.2.3.2 Panicgrass

The dunes shall subsequently be over seeded into the stands of American beachgrass with panicgrass from the centerline of the dune to the landside dune toe. The panicgrass shall be seeded at a rate of 8 - 12 pounds of seed per acre. Seeds shall be planted 1.5 to 2 inches deep either by hand or by a mechanically operated drill or seeder.

3.2.4 Planting Season

Beachgrass shall only be planted between 15 October and 1 April, under nonfrozen soil conditions. Panicgrass seeds shall only be planted between 1 November and 15 April.

3.2.5 Care and Protection

The Contractor shall be responsible for proper care and protection of all planted areas. At least 80% plant survival is required in areas at the end of the first growing season. Areas having less than an 80% survival rate shall be replanted and fertilized by the Contractor.

3.3 MEASUREMENT AND PAYMENT

3.3.1 Dune Grass

The work specified in this section for planting and seeding of dune grass will not be measured for payment. Payment for this work will be made at the contract lump sum price for "Dune Grass", Base Bid Item No. 1g and Option 1 Bid Item No. 2f (if Option 1 is awarded).

3.3.2 Sand Fence

The work specified in this section for sand fence, installed parallel to the dune centerline, will be measured for payment by the linear footage of sand fence installed. Payment for this work will be made at the contract unit price for "Sand Fence," Base Bid Item No. 1h and Option 1 Item No. 2g

(if Option 1 is awarded). (All sand fence incidental to construction of dune crossovers shall be included in the unit prices for those dune crossovers.)

-- End of Section --

SECTION 02500

DUNE CROSSOVERS AND ACCESS ROAD

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all operations required for the construction of pedestrian, vehicle, handicapped, and piping plover dune crossovers, and the construction of an access road as specified herein and shown on the drawings.

1.2 REFERENCES

The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 422	(1963, Rev. 1998) Particle-Size Analysis of Soils
ASTM D 1556	(2000) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 1557	(2000) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/cu. ft. (2,700 kN-m/cu.m.))
ASTM D 2922	(1996e1) Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D 3017	(1996) Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
ASTM F 593	(1998) Stainless Steel Bolts, Hex Cap Screws, and Studs
ASTM F 594	(1991) Stainless Steel Nuts

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME B18.22.1	(1965; R 1990) Plain Washers
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AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA)

AWPA C2	(2000) Lumber, Timbers, Bridge Ties, and Mine Ties Preservative Treatment by Pressure Process
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AWPA M4	(1999) The Care of Preservative-Treated Wood Products
AWPA P5	(2001) Standards for Waterborne Preservatives

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB-01	(1994; Supplements 8 thru 11) Grading Rules for Southern Pine Lumber
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NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

NJDOT Specifications	(1989 Edition) Standard Specifications for Road and Bridge Construction
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1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Handicap, Vehicle, and Pedestrian Crossovers, and Access Road; G,DO.

The Contractor shall submit drawings which graphically show the details of the handicap, vehicle and pedestrian crossovers including materials, connections, and details of fabrication and installation. **Shop drawings shall include all survey data for connections of the crossovers to existing ground.** A typical drawing shall be submitted for all locations requiring a standard pedestrian crossover. A separate shop drawing shall be submitted for each location requiring a handicap crossover. **The shop drawings shall include all details of handicap crossover construction, including all dimensions and joist splice connections.** A separate shop drawing shall be submitted for each location requiring a vehicle crossover. A separate shop drawing, showing a typical cross section, shall be submitted for the new access road and the improvements to the existing access road. All shop drawings for **pedestrian** crossovers shall include the number and length of the units required.

SD-03 Product Data

Materials for Handicap, Vehicle, and Pedestrian Crossovers; G,DO

The Contractor shall submit information describing the quality and performance of the materials proposed for all crossovers.

SD-06 Test Reports

Grain Size Distribution Curves; G,DO.

Grain size distribution curves shall be in accordance with ASTM D 422 and be submitted from the source(quarry) of the I-5 to be used on the vehicle dune crossovers.

SD-07 Certificates

Work Plans for Handicap, Vehicle, and Pedestrian Crossovers; G,DO.

The Contractor shall submit work plans for the construction and installation of the handicap, vehicle, and all types of pedestrian crossovers. The work plans shall include the labor, equipment, and methods to be used to fabricate and/or install the crossovers. **Individual work plans shall be prepared for each type of crossover.**

PART 2 PRODUCTS

2.1 SELECT FILL

Soil aggregate, designation I-5, conforming to Subsection 901.09 of the NJDOT Specifications. The soil aggregate shall have a gradation designation of I-5 as specified in Subsection 901.21, Table 901-2 of the NJDOT Specifications. Recycled materials are not acceptable.

2.2 CRUSHED CLAMSHELLS

Crushed clamshells shall be as supplied by W. Franlin Garrison, P.O. Box 94, Dividing Creek, NJ 08315, 856-785-0919, 856-447-3722 (fax), or approved equal.

2.3 LUMBER AND TIMBERS

2.3.1 Decking, Posts and Structural Lumber

Lumber and timbers shall be the Southern Yellow Pine, grade "dense standard decking" per SPIB-01. Lumber and timbers shall be treated in accordance with AWPAC2 with waterborne preservatives listed in AWPAC5 to a retention level of 0.40 pcf intended for ground contact

2.3.2 Handrails, Side Rails and Top Rails

Lumber used for the handicap crossover handrails, side rails and top rails shall be constructed with wood-polymer composite lumber. Color shall be natural.

2.4 THRU BOLTS, SCREWS, NUTS, AND WASHERS

ASTM F 593 or ASTM F 594, Group 2 (316 alloy) stainless steel for bolts, and nuts. ASME B18.22.1 for washers, except fabricate washers of 316 alloy stainless steel. **Screws shall be weather guard coated steel. Nails shall be hot-dipped galvanized steel.**

2.5 GEOTEXTILE

Geotextile shall be as specified in Section 02373 GEOTEXTILE

2.6 SAND FENCE

Sand fence shall be as specified in Section 02446 SAND FENCE AND DUNE GRASS

PART 3 EXECUTION

3.1 VEHICLE AND PEDESTRIAN DUNE CROSSOVERS AND ACCESS ROAD

3.1.1 General

The vehicle and pedestrian dune crossovers and the access road shall be constructed in the locations and in the manner indicated on the contract drawings using geotextile, select fill and crushed clamshells. The geotextile shall be placed as specified in Section 02373 GEOTEXTILE. The existing access road shall be bladed or excavated as necessary and a new access road constructed on top using the same materials specified above for the new access road. Finish grade of existing road shall match grade of new access road.

3.1.2 Placing, Spreading, Moisture Control and Compaction

Select material shall be placed in maximum 12 inch lifts and compacted to at least 90 percent laboratory maximum dry density as determined by the Modified Proctor test procedure as specified in ASTM D 1557. If the select material is too wet to facilitate proper compaction, it shall be removed and replaced or dried out by any method approved by the Contracting Officer. Placement of the material shall be made to the lines and grades shown on the contract drawings and compacted by the controlled use of the hauling and spreading equipment. Movement of the equipment shall be distributed as much as practicable over the surface to provide uniform compaction and complete coverage of the fill. Crushed clamshells shall be dumped and spread to the lines and grades as shown on the contract drawings. Crushed clamshells shall not be compacted.

3.1.3 Testing

The Contractor shall be wholly responsible for furnishing material meeting the requirements specified herein, for placing the material within the limits of moisture suitable for proper compaction, and for compacting the materials in accordance with the requirements of this section. The Contractor is also responsible for performing laboratory tests as required to control the work and demonstrate compliance with material specifications. Testing shall be as specified in Section 01450 CONTRACTOR QUALITY CONTROL. Field in-place density shall be determined in accordance with ASTM D 2922. ASTM D 2922 results in a wet unit weight of soil and ASTM D 3017 shall be used to determine the moisture content of the soil. The calibration curves furnished with the moisture gauges shall also be checked along with density calibration checks as described in ASTM D 3017; the calibration checks of both the density and moisture gauges shall be made at the beginning of a job on each different type of material encountered and at intervals as directed by the Contracting Officer. When test results indicate, as determined by the Contracting Officer, that compaction is not as specified, the material shall be removed, replaced and recompact to meet specification requirements. Tests on recompact areas shall be performed to determine conformance with specification requirements. The following number of tests, if performed at the appropriate time, will be the minimum acceptable for each type operation.

- a. During the course of construction, if the source, appearance or performance of the crossover materials noticeably changes in the opinion of the Contracting Officer, the appropriate index testing,

described herein, of the materials shall be repeated to ensure specification compliance and reestablish moisture/density relationships for compaction.

b. Three compaction tests shall be performed in accordance with ASTM D 1557 for each type material used as crossover material to determine the optimum moisture and laboratory maximum density values.

c. A minimum of two in-place nuclear density tests shall be performed per lift of material placed at each crossing.

d. In-place densities shall be checked using ASTM D 1556 a minimum of one time during placement of the crossover materials for every 5 crossovers constructed. Additional checks shall be performed as requested by the Contracting Officer.

3.1.3.1 Action Required for Non-Compliance

Whenever testing specified in this Section indicates material non-compliance, the Contractor shall be required to remove all material not meeting the specification requirements. The Contracting Officer shall require as many additional tests as necessary to identify the limits of unsuitable material. No additional payment will be made for test required to determine the limits of unsuitable material nor for the cost of removal and replacement with suitable material.

3.1.4 Associated Sand Fence

The sand fence shall be constructed as indicated on the contract drawings and in the manner specified in Section 02446 SAND FENCE AND DUNE GRASS.

3.2 HANDICAP DUNE CROSSOVERS

The handicap dune crossovers shall be constructed as indicated on the contract drawings. Immediately after cutting, notching and drilling all lumber and timbers, the lumber and timbers shall be treated as specified in AWPA M4.

3.3 PIPING PLOVER CROSSOVERS

Piping plover crossovers shall be constructed to the line and grades as shown on the contract drawings using beachfill material. Beachfill shall be as specified in Section 02390 BEACHFILL.

3.4 MEASUREMENT AND PAYMENT

3.4.1 Pedestrian Dune Crossovers

The work specified in this section for the construction of pedestrian dune crossovers will be measured for payment by the linear foot of crossovers satisfactorily provided and accepted. Payment will be made at the contract price per unit for "Pedestrian Dune Crossovers," Base Bid Item No. 1d and Option 1 Bid Item No. 2d (if Option 1 is awarded). Payment shall include sand fence incidental to the construction of these dune crossovers.

3.4.2 Vehicle Dune Crossovers

The work specified in this section for the construction of vehicle dune

crossover will not be measured for payment. Payment will be made at the contract lump sum price for "Vehicle Dune Crossovers," Base Bid Item No. 1e and Option 1 Bid Item No. 2e (if Option 1 is awarded).

3.4.3 Handicap Dune Crossovers

The work specified in this section for the construction of handicap dune crossovers will be measured for payment by the linear foot of handicap dune crossovers satisfactorily constructed and accepted. Payment will be made at the contract price per unit for "Handicap Dune Crossovers," Base Bid Item No. 1f.

3.4.4 Piping Plover Crossovers

The work specified in this section for the construction of the piping plover crossovers will be measured and paid for by the cubic yard of beachfill in place on the beach as specified in Section 02390 BEACHFILL.

3.4.5 Access Road Construction

No separate measurement or payment will be made for the work specified in this section for the construction of the access road. All costs in connection with this work shall be included in the contract unit price for "Beachfill - Area No. 3", Option 1 Bid Item No. 2a. (if Option 1 is awarded).

-- End of Section --

SECTION 06140

PIPE SUPPORT SYSTEMS

PART 1 GENERAL

1.1 SCOPE OF SECTION

The work covered by this section consists of furnishing all labor, materials, plant and equipment, and performing all operations required for installing the stormwater outfall pipe support systems as specified herein and shown on the drawings.

1.2 APPLICABLE PUBLICATIONS

The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI B18.22.1 (1981) Plain Washers

ASTM INTERNATIONAL (ASTM)

ASTM A 153 (2001a) Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A 307 (2000) Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

ASTM A 563 (2001) Carbon and Alloy Steel Nuts

ASTM D 25 (1999) Round Timber Piles

ASTM F 593 (1998) Stainless Steel Bolts, Hex Cap Screws, and Studs

ASTM F 594 (1991) Stainless Steel Nuts

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME B18.22.1 (1965; R 1990) Plain Washers

AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA)

AWPA C1 (2000) All Timber Products - Preservative Treatment by Pressure Processes

AWPA C2 (2000) Lumber, Timbers, Bridge Ties, and Mine Ties Preservative Treatment by Pressure Process

AWPA C3 (1999) Piles - Preservative Treatment by Pressure Processes

AWPA M2 (2000) Inspection of Treated Timber

Products

AWPA M4 (1999) The Care of Preservative-Treated
Wood Products

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

FS MM-L-751 (Rev. H) Lumber, Softwood

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB-01 (1994; Supplements 8 thru 11) Grading
Rules for Southern Pine Lumber

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (Latest Rev.) Safety and Health
Requirements Manual

1.3 QUALITY ASSURANCE

1.3.1 Inspection

The Contractor shall provide the necessary facilities at the work site for the proper inspection of each timber pile and timber cribbing upon delivery. Any material inspected and found not to meet this specification shall be removed from the site and disposed of at the expense of the Contractor. If during any phase of the contract work the Contracting Officer has reason to believe the preservative treatment of the timber piles or timber cribbings is of insufficient quality the Contractor may be required to test the piles or timber cribbing in accordance with AWPA M2. Any material damaged after inspection may be subsequently rejected if damage is deemed sufficient for rejection by the Contracting Officer. All rejected materials shall be removed from the site and disposed of at the expense of the Contractor.

1.3.2 Delivery, Storage, and Handling

Materials delivered to the site shall be inspected for damage, unloaded, and stored with a minimum of handling. Materials shall not be stored directly on the ground. Materials shall be handled in such a manner as to insure delivery to the installation location in a sound, undamaged condition.

Special care shall be taken in supporting timber piles to prevent the inducing of excessive bending stresses in the piles. Handling of timber piles shall be in accordance with AWPA M4. Timber piles shall be carefully handled without dropping, breaking of outer fibers, or penetrating the surface with tools.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Equipment Description; G,DO.

Detailed descriptions of all pile driving and jetting equipment to be used in the work shall be submitted for approval prior to commencement of pile installation. This shall include sketches, details, and descriptions of the driving hammer, power plant, leads, driving cap and cushion material, collars, jetting nozzle, water supply system, and other appurtenances.

Detailed Work Plan; G,DO.

The Contractor shall submit to the Contracting Officer, for approval, prior to performing the work in this section, a detailed work plan for transporting, storing, inspecting, repairing, recording, and installing all materials. This plan shall emphasize the means in which the Contractor shall ensure that the timber piles are installed so all the pipe joints are located within a support system as indicated on the contract drawings. This plan shall include detailed drawings or sketches of any templates or guides which shall be used to properly locate the piles prior to installation.

Timber Piles. Timber Cribbing. Thru Bolts, Nuts, and Washers; G,DO.

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

Preservative Treatment Certificate; G,DO.

Certificates of compliance from an approved testing organization attesting that the timber piles and timber cribbing to be used in the work have been given the preservative treatment required by these specifications, shall be submitted to the Contracting Officer prior to delivery of any materials to the work site.

SD-18 Records

Pile Driving Records; G,DO.

A complete and accurate record of each pile shall be furnished by the Contractor within three days of completion of driving. The record shall indicate the outfall number and station, the pile location (as driven), butt and tip diameters, total length, embedded length, final elevations of butt and tip, blows required for each foot of penetration throughout the entire length of the pile and for the final 6 inches of penetration, and the total driving time. The record shall also include the type and size of the hammer used, the rate of operation, and the type and dimensions of pile cap and cushion used. Any unusual conditions encountered during pile installation shall be recorded and immediately reported to the Contracting Officer.

1.5 SITE CONDITIONS

Bidders are expected to examine the site of the work in accordance with Contract Clause: SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK to determine the conditions affecting their operations. The entire work site

is designated as a hard hat area in accordance with EM 385-1-1.

PART 2 PRODUCTS

2.1 TIMBER PILES

Timber piles shall be Douglas Fir or Southern Yellow Pine, clean-peeled, conforming to ASTM D 25. The nominal butt diameter, measured 3 feet from the butt, shall be 12 inches. The nominal tip diameter shall be greater than 9 inches. Tolerances of all piles shall be as specified in ASTM D 25. Southern Yellow Pine timber piles shall be pressure-preservative treated with CCA (Chromated Copper Arsenate) water borne preservative with a uniform minimum net retention of solid preservative of 2.5 pounds per cubic foot. Douglas Fir timber piles shall be pressure-preservative treated with ACZA (Ammoniacal Copper Zinc Arsenate) water borne preservative with a uniform minimum net retention of solid preservative of 2.5 pounds per cubic foot. All piles shall be marked at 1 foot intervals starting from the tip to the butt with a lumber crayon. The butt and tip of the piles shall be cut square with the long axis of the piles. Chamfering or shaving of the pile tips will not be permitted. Exposed areas of treated piles that are cut or drilled after treatment shall receive a field treatment in accordance with AWP M4.

2.2 TIMBER CRIBBING

Timber cribbing shall be Southern Yellow Pine, Stress Grade No. 1, and shall conform to SPIB-01 and the applicable requirements of FS MM-L-751. Cribbing shall be surfaced four sides and shall be pressure-preservative treated with CCA (Chromated Copper Arsenate) water borne preservative with a uniform minimum net retention of solid preservative of 2.5 pounds per cubic foot. Exposed areas of treated timber that are cut or drilled after treatment shall receive a field treatment in accordance with AWP M4.

2.3 THRU BOLTS, NUTS, AND WASHERS

ASTM F 593 or ASTM F 594, Group 2 (316 alloy) stainless steel for nuts and bolts. ASME B18.22.1 for washers, except fabricate washers of 316 alloy stainless steel.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 General

After inspection of each pile upon delivery, each pile shall be inspected in the leads prior to installation. Damaged piles shall be repaired in accordance with AWP M4, unless the pile is damaged to such extent that it is rejected. Piles shall be laterally supported during driving, but shall not be unduly restrained from rotation in the leads. Pile collars or bands shall be placed around the pile butt to prevent brooming. Piles shall be installed such that no more than 2 feet of each pile needs to be cut off. Cutting of piles, if required, shall be with pneumatic tools, sawing, or other means approved by the Contracting Officer. Bolt holes as indicated on the drawings shall be of the size that will insure a driving fit.

Timber cribbing shall be **cut** to fit the **exact outside** circumference of the

pipe, cut to length, and attached to the wood piles using thru bolts, washers, and nuts as shown on the drawings. Nailing of timber cribbing to the piles prior to drilling holes for thru bolts will only be permitted through the vertical face of the cribbing.

3.1.2 Equipment

3.1.2.1 General

Pile driving hammers shall be steam, air or diesel drop, single-acting, double-acting, or differential-acting type. The size and capacity of hammers shall be as recommended by the manufacturer for the pile weights and soil formation to be penetrated. The maximum driving energy of hammers shall be 12,000 foot-pounds for piles of any length. Driving caps shall be of an approved design and shall be capable of protecting pile heads, minimizing energy absorption, and transmitting hammer energy uniformly and consistently to the piles. Driving caps shall fit snugly on the top of the piles and shall employ a cushion block to prevent impact damage to the piles. The cushion block may be a solid or laminated softwood block with the grain parallel to the pile axis and enclosed in a close-fitting steel housing. The thickness of the block shall be suitable for the length of pile to be driven and character of subsurface material to be encountered. Generally, thicker blocks are required for longer piles and softer subsurface material.

3.1.2.2 Pile Collars and Bands

Pile collars or bands for protecting pile butts against splitting, brooming, and other damage while being driven shall be of an approved design.

3.1.2.3 Jetting Equipment

Jetting equipment shall have not less than two removable or fixed, water or combination air-water type jets. Equipment shall be designed so that the discharge volume and pressure are sufficient to freely erode the material under and adjacent to the piles.

3.1.3 Placement

Piles shall be accurately placed in the correct locations and alignments both laterally and vertically to ensure that the pipe joints will be located within a support system as shown on the contract drawings. The correct location of piles shall be maintained by the use of templates, guides, or by other approved means. A vertical deviation during placement of not more than 1/4 inch per foot of pile will be permitted. The Contractor shall provide a method to monitor the pile verticality during placement. A lateral deviation from the correct location at the final top elevation of not more than 2 inches will be permitted. A combination of the vertical and lateral deviations at the final top elevation shall not exceed the allowable lateral deviation. Manipulation of piles to force them into position will not be permitted. Piles incorrectly placed shall be pulled and replaced at the Contractor's expense.

3.1.4 Driving

3.1.4.1 General

Piles shall be driven without interruption to the depth indicated on the

contract drawings. During driving, pile driving hammers shall be operated at the rate and conditions recommended by the hammer manufacturer.

3.1.4.2 Hammer Pressure

Sufficient pressure shall be maintained at the hammer so that: (1) for double-acting hammer, the number of blows per minute during and at the completion of driving of a pile is approximately equal to that at which the hammer is rated; (2) for single-acting hammer, there is a full upward stroke of the ram; and (3) for differential-type hammer, there is a slight rise of the hammer base during each upward stroke. The driving cap or cushion block shall be replaced whenever they become damaged, split, highly compressed, charred or burned, or have become spongy or deteriorated in any manner. Under no circumstances will the use of small wood blocks, wood chips, rope, or other material permitting excessive loss of hammer energy be permitted.

3.1.5 Jetting

Jetting may be used for placement of the piles. During the jetting operation the Contractor shall take all necessary precautions to ensure that the jetting nozzle does not advance ahead of the pile being jetted. Each pile shall be seated by stopping the pile and the jetting 3 feet from the final tip elevation and immediately driving the pile 3 feet or to the maximum of 5-10 blows per inch, whichever occurs first. Driving of the piles shall be as specified in Paragraph "Driving". The driving hammer shall be as specified in Paragraph "Equipment".

3.1.6 Surface Treatment

Immediately after cutting, notching and drilling all affected surfaces of the timber piles and timber cribbing shall be treated as specified in AWWA M4.

3.2 MEASUREMENT AND PAYMENT

The work specified in this section for providing new pipe support systems for the size pipes shown on the drawings will be measured for payment per linear foot of stormwater outfall extension. Payment for this work will be made at the contract unit price for "Extension of Stormwater Outfalls," , Option 1 Item No. 2c (if Option 1 is awarded).

-- End of Section --